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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,435	08/21/2001	Ingemar Eriksson	821-33	4210

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EXAMINER

CASTRO, ARNOLD

ART UNIT PAPER NUMBER

3747

DATE MAILED: 08/24/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/831,435

Applicant(s)

ERIKSSON ET AL.

Examiner

Arnold Castro

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-50 is/are pending in the application.
- 4a) Of the above claim(s) 47-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-36 42 44-46 is/are rejected.
- 7) ☒ Claim(s) 37-40 and 43 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group B in the reply filed on February 23, 2004 is acknowledged. The traversal is on the ground(s) that claims 26-40 contains the same general inventive concept with the elected Group B and should be examined with the elected claims. This argument is found persuasive because the features of the valves are recited in Group A. The claims of Group C are withdrawn from consideration. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 26, 28, 31, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Kern et al. (US/4,020,809).

Keen et al. discloses an EGR system for diesel engine has an EGR mixing valve (26). The valve has two dampers (34, 35) fixed at 90 degree opposing angles. Inherently when one valve closes the other is at maximum open state. A drive motor 28 is connected to valve 26. The valve is operated based on engine load. See figures 1-4 and col. 3 lines 32 through col. 5, line 15.

4. Claims 26, 28, 30-32, 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Meidetucza et al. DE 3237337 A.

Art Unit: 3747

5. Meidetucza et al. discloses a diesel engine having a supercharger 2 with the EGR mixing valve (10, 11, 12) arranged between the intake and supercharger. The valve has two dampers (10,11) fixed at 90 degree opposing angles. Inherently when one valve closes the other is at maximum open state. A servo drive motor 12 is connected to valve 26. The valve is operated based on engine pressure differential between the pipe and feed as regulated by control unit.

6. Claim 41 is rejected under 35 U.S.C. 102(b) as being anticipated by Ohtsubo (US/5,427,141).

Ohtsubo shows a valve for mixing two fluids wherein one of the dampers is always open. See col. 3 lines 33-44.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 27, 29, 33, and 34 are rejected under 35 U.S.C. 103(a) as being obvious over Kern et al. (US/4,020,809) in view of Kashiyama et al. (US/5,205,265).

9. Kerns applies as in claim 26, and 31 above, however does not expressly show the pickup point for exhaust gases. Kashiyama et al. shows the EGR gases being diverted after a catalyst (32) and particle filter (42) and inline with EGR cooler (41). Col. 4, lines 35-65 and figure 1.

Art Unit: 3747

At the time of invention it would have been obvious to mount the valve (26) of Kerns after a catalyst and filter and EGR cooler as taught in Kashiya. The motivation to do so would be to condition the exhaust gases, thus preventing carbon buildup in valve 26 and engine.

10. Claims 42 and 44 rejected under 35 U.S.C. 103(a) as being unpatentable over by Ohtsubo (US/5,427,141) in view Wade (US/4,924,840).

Ohtsubo shows a dual valve for mixing two fluids wherein one of the dampers is always open and mention that an actuator is mounted at point 10. However Ohtsubo does not expressly disclose the actuator.

Wade shows a dual valve functioning in same manner as the dual valve of Ohtsubo. Wade states the two valves are place in common shaft and maintain proper percentage of flow however does not expressly state that one of the dampers is always open. Wade shows a stepper motor 52 connected to valve to control flow. See figure 2.

At the time of invention it would have been obvious to use the actuator (e.g. stepper motor) shown in Wade with the valve of Ohtsubo. Motivation would have been to increase response time as noted in Wade.

Allowable Subject Matter

11. Claims 37-40 and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 3747

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnold Castro whose telephone number is (703) 305-0039. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yuen Henry can be reached on (703) 308-1946. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arnold Castro
Examiner
Art Unit 3747

AC